

AIM Ann Report  
1875 to 1876

REPORT  
OF THE  
AUCKLAND INSTITUTE  
FOR 1875-76.

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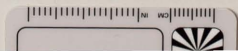
ADOPTED AT THE ANNUAL MEETING HELD FEBRUARY 21, 1876.

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AUCKLAND:  
*Printed at the Daily Southern Cross Office, Queen-street.*

1876.

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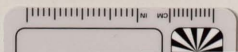
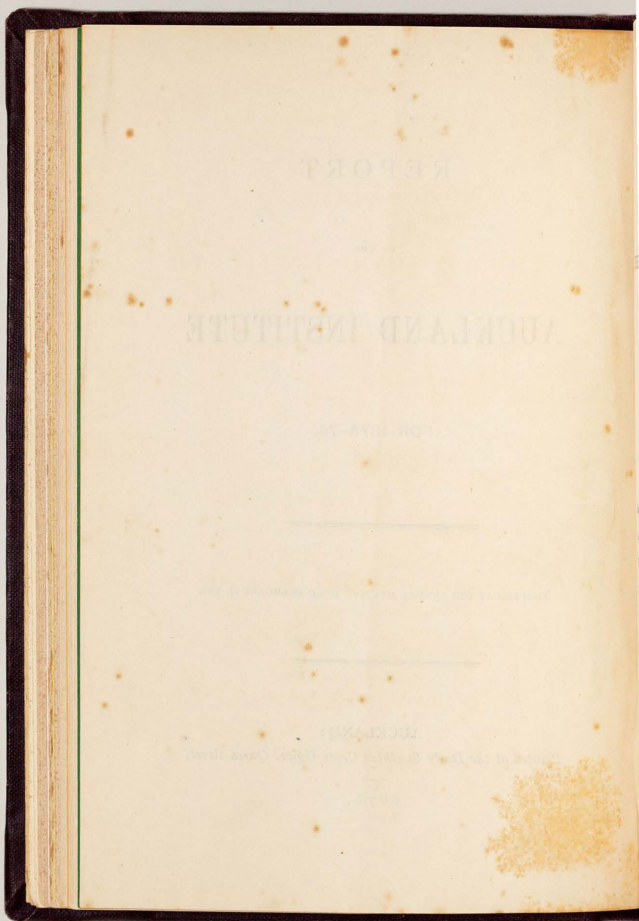
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—  
OFFICERS  
OF  
THE AUCKLAND INSTITUTE.

—  
COUNCIL.

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HIS HONOUR MR. JUSTICE GILLIES.

BARSTOW, R. C., Esq.

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HAULTAIN, The Hon. Col.

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STEWART, J., Esq., C.E.

WHITAKER, F., Esq.

Secretary and Treasurer :

T. F. CHEESEMAN, Esq., F.L.S.

Auditor :

T. MACFFARLANE, Esq.

AIM Ann Report  
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1876

OFFICERS

THE ACKLAND INSTITUTE

COUNCIL

President

The Hon. Mr. Justice Gault

Hon. Mr. Justice Gault

Hon. Mr. Justice Gault

Hon. Mr. Justice Gault

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Hon. Mr. Justice Gault

Hon. Mr. Justice Gault

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Hon. Mr. Justice Gault



# AIM Ann Report 1875 to 1876

*The following Magazines and Periodicals are Circulated  
amongst the Members :—*

Quarterly Journal of Microscopical Science  
Quarterly Journal of Science  
Popular Science Review  
Nature  
Geological Magazine  
Lancet  
Scientific American  
The Academy  
The Garden  
Botanical Magazine  
Gardener's Chronicle  
Chemical News  
Engineering  
Iron  
Journal of Botany  
Monthly Microscopical Journal  
Science Gossip  
Electrical and Telegraphic Review  
etc. etc. etc.

WINTER SESSION, 1876.

*Meetings will be held on the following Monday Evenings :*

MAY 8	AUGUST 7
JUNE 5	SEPTEMBER 4
JULY 3	OCTOBER 2
OCTOBER 30.	

*To commence at 7.30 p.m.*

## Extract from the Rules.

1. Any person desiring to become a member of the Institute, shall be proposed in writing by two members, and shall be balloted for at the next meeting of the Council.
2. New Members on election to pay one pound one shilling entrance fee, in addition to the usual subscription of one pound one shilling, the annual subscription being payable in advance on the first day of April for the then current year.
3. Members may at any time become Life-members by one payment of ten pounds ten shillings, in lieu of future annual subscriptions.

## REPORT.

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THE Council of the Auckland Institute, in presenting their Eighth Annual Report, have the pleasure of informing the members that the great bar to the progress of the Institute—the absence of proper accommodation for the Museum and Library—will shortly be removed. It will be remembered that at the last annual meeting it was proposed to raise the major portion of the funds required for a new Museum by means of subscription among the members and their friends; and it will also be remembered how prompt and how liberal the response to this proposition was,—over £1,400 being subscribed at the meeting. Since then the Building Fund has been raised to nearly £1,900, by far the greater portion of which has already been placed at the disposal of the Council; while there is good reason to believe that before the list is finally closed it will have reached the amount of £2,000. The Council would here tender their very sincere and grateful thanks to those gentlemen who have so liberally contributed to this attempt to place the Institute in a position to fulfil the duties for the performance of which it was originally founded.

The design for the new building submitted to the last annual meeting has been departed from in several points; the most important being the substitution of a



lantern in the roof for side windows, and the addition of a gallery to the large hall. It is true that these alterations have considerably increased the cost, but this disadvantage will be more than counterbalanced by the additional accommodation obtained. On the adoption of the amended designs, tenders were at once invited; the contract being eventually let to Mr. R. Dickson for the sum of £3,377. The works are now in an advanced state, and will probably be completed in time for the opening meeting of the Session. Every attempt has been made, both by the Building Committee and by the architect, to ensure the erection of a thoroughly sound building.

It will be observed that the estimated cost exceeds by nearly £1,400 the amount likely to be realized by subscription. To meet the deficiency the Council have decided to mortgage a portion of the site, and a Bill granting the necessary powers was introduced into Parliament during its last Session, passing without opposition. In drafting the Bill, care has been taken while granting ample security to the mortgagee, to provide against the possible alienation of the property. Negotiations are now in progress that will probably result in the amount required being obtained on very favourable terms.

The seventh volume of the "Transactions of the New Zealand Institute" has been published during the year, and distributed to the members. The importance of the yearly volume, both as regarded from a scientific and a utilitarian point of view, is now generally admitted; while the mass of valuable information annually issued respecting the natural products and resources of the colony cannot but exercise a material influence upon the progress of the whole community.

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Seven meetings have been held during the last twelve months, at which the following papers have been read :

1. Introductory Address :—by the PRESIDENT.
2. On the best line for the Submarine Cable between Australia and New Zealand :—by the Rev. A. G. PURCHAS, M.R.C.S.,E.
3. On the Coleoptera of Auckland :—by Captain T. BROWN.
4. On the Mollusca of Auckland Harbour :—by T. F. CHEESEMAM, F.L.S.
5. Notes on the Observations for the Transit of Venus :—by T. HEALE.
6. Notes on the Mason Bee :—by Major W. G. MAIR.
7. Notice of the Discovery of Moa Remains at Ellerslie :—by T. F. CHEESEMAM, F.L.S.
8. Notes on the Sword Fish (*Xiphias Gladius*) :—by T. F. CHEESEMAM, F.L.S.
9. Remarks on the *Pselaphidæ* of New Zealand :—by Captain T. BROWN.
10. Description of some new species of *Pselaphidæ* from New Zealand :—by D. SHARP, M.B.—Communicated by Captain T. Broun.
11. Notes on Quartz Crushing at the Thames :—by J. GOODALL, C.E.
12. A Sketch of Polynesia :—by J. ADAMS, B.A.
13. The Coals and Coalfields of the Province of Auckland :—by J. M. TUNNY, Provincial Analyst.
14. Analyses of the Auckland Fire-clays :—by J. A. POND.
15. Description of a new species of *Hymenophyllum* :—by T. F. CHEESEMAM, F.L.S.

16. Notes on the Discovery of Moa and Moa-hunters' Remains near Whangarei :—by G. THORNE, jun.

17. Notes on the evidences of Recent Elevation in the Waikato District :—by J. STEWART, C.E.

18. On the Introduction and Acclimatisation of the Salmon :—by J. STEWART, C.E.

The removal of a large portion of the old buildings, together with other causes, have compelled the Council to temporarily close both the Museum and Library. Notwithstanding this, the donations received during the year have been both numerous and valuable, as may be seen from the appended list. The Council would especially direct attention to the valuable library bequeathed by the late Mr. G. F. Edmonstone, consisting of 560 volumes relating to Physical Science, many of which are costly and difficult to obtain, while all are of a class well adapted to the requirements of the Institute. In the Museum a very interesting addition has been received in the shape of a collection of Moa bones, Human remains, Stone adzes, and Obsidian flakes and chips, discovered near Whangarei by Mr. G. Thorne, jun. The thanks of the Society are also due to Captain G. Mair for a large number of the Tuatara Lizards (*Sphenodon punctatum*) from the Rurima Rocks near Matata—one of the few remaining localities for this singular animal.

While congratulating the members on the improved position of the Institute, the Council cannot conceal that a considerably increased expenditure will now be required. Enlarged accommodation would alone imply this; but when in addition it is considered that our Library has yet in a great measure to be supplied with books, and our Museum to be filled, it is obvious that the expenditure required will be large indeed: too large, in fact, to be fairly borne by an institution dependent upon

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private subscriptions alone for its support. There can be no doubt that the maintenance of a Free Public Library and Museum ought here, as in the Southern Provinces, to be provided for out of the public purse; and to this end the efforts of the Council will be directed. In the meantime the Council earnestly hope that all members of the community taking a sincere interest in the spread of scientific knowledge and its applications will think it a pleasure as well as a duty to contribute, directly or indirectly, to the support of the Auckland Institute.



# THE TREASURER IN ACCOUNT WITH THE AUCKLAND INSTITUTE.

FEBRUARY 10TH, 1875, TO FEBRUARY 15TH, 1876.

Dr.

Cr.

	£	s.	d.		£	s.	d.
To Balance in Bank of New Zealand, February 10th, 1875	113	18	9	By Books and Periodicals	63	17	2
" Entrance Fees and Subscriptions	211	1	0	" Additions to Museum	24	1	6
" Rents	20	0	0	" Museum Requisites, Printing, Advertisements, Lighting, &c.	55	5	9
" Books, etc., sold	6	9	9	" Miscellaneous	20	6	8
" Interest allowed on Investment Account	0	17	10	" Insurance	9	2	6
				" Curator	100	0	0
				" Life Subscription carried to Investment Account	10	10	0
				" Interest carried to Investment Account	0	17	10
				" Balance in Bank of New Zealand, Feb. 15, 1876	68	5	11
	£352	7	4		£352	7	4

## BUILDING FUND ACCOUNT.

	£	s.	d.		£	s.	d.
To Cash in Savings Bank, February 10, 1875	20	14	0	By Cash paid on account of new Buildings to date	1,300	0	0
" Donations received to date	1,588	7	0	" Balance in Bank of New Zealand, Feb. 15, 1876	354	9	6
" Interest allowed on Deposit	20	8	6				
" Deposit on Tender	25	0	0				
	£1,654	9	6		£1,654	9	9

## INVESTMENT FUND ACCOUNT.

	£	s.	d.		£	s.	d.
To Cash in Savings Bank, February 10, 1875	12	3	7	By Cash in Savings Bank, February 15, 1876	23	11	5
" Life Subscription	10	10	0				
" Interest to January 1, 1876	0	17	10				
	£23	11	5		£23	11	5

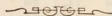
Audited and found correct, February 15, 1876,  
CHARLES TOTHILL, AUDITOR.

T. F. CHEESEMAN,  
TREASURER.

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ADDITIONS AND DONATIONS  
TO THE  
LIBRARY AND MUSEUM.



- Meteorological Report for 1874; Colonial Museum and Laboratory Report for 1874; Geological Map of New Zealand :—The Director of the Geological Survey.  
Parliamentary Papers and Reports; New Zealand Hansard for 1875; The Official Hand-book of New Zealand :—The Colonial Secretary.  
Journal and Proceedings of the Auckland Provincial Council :—The Speaker.  
Coues' Study of the Genera *Geomys* and *Thomomys* :—The United States Government.  
Map of the Danubian Principalities :—The Hon. Col. Haultain.  
The Object and Method of Zoological Nomenclature, by D. Sharp, M.B. :—The Author.  
Publications of The New Sydenham Society for 1874-5 :—Purchased.  
Publications of The Paleontographical Society for 1874 :—Purchased.  
Transactions and Proceedings of the Zoological Society for 1874-5 :—Purchased.  
134 volumes of Books :—Purchased out of the Provincial Government Grant for 1874.  
564 volumes of Books; case of Mathematical Instruments, &c. :—Bequeathed by the late G. F. Edmonstone, Esq.  
Eighteen Australian Bird-skins :—F. R. Godfrey, Mount Ridley, Victoria.  
Skeleton of *Delphinus* sp. :—J. A. Walker.  
Skull of Whale (*Berardius Arnuxii*) :—T. Spencer.  
Case of Exotic Insects :—G. H. Turner.  
Specimens of the Mason Bee, with remains of its cells :—Major W. G. Mair.  
Specimens of *Latia neritoides* :—R. R. Hunt.  
Large Centipede :—J. Hay.  
Shells from the South Sea Islands :—T. Peacock.  
*Zeus faber* :—T. F. Cheeseman, F.L.S.  
Series of Shells from the Island of Raiatea, South Pacific :—C. Voy.  
*Dolium variegatum*, *Bulinus antipodarum* :—J. Webster.  
New Zealand Shells :—J. George.  
Star Fishes, Shells, &c. :— — Hazard.



- Living Specimens of *Bulinus antipodarum*; *Sepioteuthis major* :—  
J. H. Greenway.  
New Zealand Shells :—Ingham Stephens.  
Corals, Shells, &c., from the Islands; Pearl produced by the *Tridacna* :—H. B. Sterndale.  
*Hepialus virescens* :—E. Higgins.  
*Helix Busbyi* and eggs :—J. D. Gordan.  
*Nautilus elegans* :—S. Rawlings.  
Skeleton of Kiwi :—T. F. Cheeseman, F.L.S.  
Fijian Shells :—W. Lodder.  
Specimens of the Tuatara Lizard (*Sphenodon punctatum*) :—Captain G. Mair.  
Moa bones, Human bones; Ancient Maori Adzes; Obsidian flakes and chips :—G. Thorne, jun.  
Rock Specimens from Papakura :—S. Cole.  
Ironstone from Waikomiti :—W. Will.  
Maori Stone Adzes :—G. Lang.  
*Ostrea ingens* and other fossils :—Mrs. W. H. Kissling.  
Kauri Gum imbedded in Scoria; Wood found imbedded in Scoria :—J. Fairburn.  
Auriferous Quartz from Venezuela :—A. F. Nixon.  
Series of Fossils from Whangaroa :—R. Bell.  
Silicified Wood from the Ruahine Mountains :—T. W. Hickson.  
Nickel Ore from New Caledonia; Samples of Fire-clay :—J. M. Tunny.  
Fossils from Whangape Lake :—T. Heale.  
Encrustations on the Pipes of the Pumping Association :—C. Tothill.  
Building Stone :—Captain Symonds.  
Bog Iron Ore :—Hazard.  
Galena, Silicified Wood and Cinnabar from California :—G. Scott.  
Fossil Palm Seeds :—H. A. H. Monro.  
Stone Adze :—C. Hetley.  
Leaf Impressions from Drury :—Hon. H. Chamberlin.  
Tusk of *Diprotodon* and other Marsupial Remains; Fossils from the Portland Beds; Fin of Flying Fish :—Coleman Phillips.  
Iron Ore and various Rock Specimens from Mongonui; Stone Adzes Specimens of *Danaë Berenice*; Collection of Coins :—T. Ball.  
Silicified Wood with Kauri Gum :—W. H. Warren.  
Fossil Palm Seeds from Mongonui :—Ingham Stephens.  
Mori Skull :—E. R. Norris.  
Greenstone Mere :—T. Spencer.  
Portions of Blue Gum Pile perforated by the *Teredo* :—C. O'Neill, C.E.  
New Zealand Dried Plants; Collection of Economic Grasses and Forage Plants :—T. Kirk, F.L.S.  
Cones of Californian Pine Trees :—Captain Daldy.  
Vegetable Caterpillars :—Ingham Stephens.

AUCKLAND INSTITUTE.

LIST OF MEMBERS

FOR THE

YEAR ENDING MARCH 31ST, 1876.

Adams, J., B.A., Parnell  
Aickin, G., Auckland  
Aitken, W., Auckland  
Alexander, C., Auckland  
Allen, J. E., Auckland  
Allwright, H., C.E., Auckland  
Anderson, J., B.A., Auckland  
Arney, Sir G. A., Auckland  
Atkin, W., Auckland  
Atkin, W., Kohimarama

Baber, J., C. E., Remuera  
Ball, T., Mongonui  
Barstow, R. C., R. M., Epsom  
Bates, Rev. J., Devonport  
Batger, J., Auckland  
Beere, D. M., Waipukurau  
Biss, S. B., Auckland  
Boylan, J. T., Auckland  
Breen, J., C. E., Ngaruawahia  
Brett, H., Auckland  
Broun, Capt. T., Tairua  
Bruce, Rev. D., Auckland  
Buchanan, Jas., Auckland  
Buchanan, John, Auckland  
Buckland, W. F., Remuera

Campbell, H., Shortland  
Campbell, J. L., M. D., Auckland  
Cawkwell, W. J., Auckland  
Carder, W., Auckland

Chamberlin, Hon. H., Auckland  
Chambers, J., Auckland  
Chapman, G. T., Auckland  
Cheeseman, T. F., F.L.S., Auckland  
Clark, J. M., Remuera  
Clarke, The Ven. Archdeacon  
E. B., Waimate.  
Clarke, W. H., C.E., Hamilton  
Clarke, H. T., Tauranga  
Cook, C. E., Picton  
Cowie, The Right Rev. W. G.,  
D. D., Bishop of Auckland  
Cox, A., Hamilton  
Cruickshank, D. B., Auckland  
Curnow, J., B.A., Auckland

Dalby, W. C., Auckland  
Daveney, Capt. B., Auckland  
Dawson, F. W. H., M.R.C.S.E.,  
Auckland  
Day, R., M. D., Auckland  
Dickson, E. B., Auckland  
Drake, W., Grahamstown  
Dyson, R. W., Auckland

Earl, W., Parnell  
Errington, W., C.E., Auckland

Fairburn, J., Otahuhu

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Farmer, The Hon. J., London  
Fenton, F. D., Auckland  
Firth, J. C., Auckland  
Fish, T., Auckland  
Floyd, W. H., Tauranga  
Ford, S. H., M.R.C.S.E., Russell  
Fox, A., M.R.C.S.E., Grahams-  
town  
Fraser, G., Auckland  
Fraser, Rev. J. M., Coromandel

George, J., Auckland  
Gibbons, E., Onehunga  
Gillies, His Honour Mr. Justice,  
Auckland  
Gittos, B., Auckland  
Goldsbro', C. F., M.D., Parnell  
Goodall, J., C.E., Auckland  
Goodfellow, W., Otara  
Gorrie, W., Auckland  
Graham, W. K., London  
Green, Major, Auckland

Hall, J. W., Grahamstown  
Harding, S., C.E., Auckland  
Haultain, The Hon. Col. T. M.,  
Auckland  
Hay, D., Parnell  
Hay, J., Auckland  
Heale, T., Auckland  
Henderson, J., C.E., Wellington  
Henderson, T., jun., Auckland  
Herapath, P., Auckland  
Hesketh, E., Auckland  
Hill, W. J., Auckland  
Hobbs, R., Pokeno  
Holdship, G., Auckland  
Howden, —, Auckland  
Humphreys, W., Auckland  
Hunt, R. R., Ngaruawahia  
Hunt, W. A., Remuera

Johnston, G., Auckland  
Jones, Owen, Auckland  
Jones, S., Auckland

Kemp, H. T., Auckland  
Kent, F. D., Auckland  
Kenny, N., Ngaruawahia  
Kidd, Rev. R., L.L.D., Auckland  
Kinder, Rev. J., D.D., St. John's  
College  
Kinsella, J., Parnell  
Kirk, T., F.L.S., Wellington  
Kissling, G. S., Parnell  
Kissling, T., Parnell  
Kissling, W. H., Parnell

Kitchen, G., Auckland  
Knorrr, C. B., C.E., Auckland

Lamb, J., Riverhead  
Lambert, S. J., F.R.A.S., Newton  
Larkworthy, F., London  
Leaf, C. J., F.L.S., S.A., G.S.,  
London  
Lee, W., M.D., Auckland  
Lindsay, J., C.E., Ngaruawahia  
Lodder, W., Remuera  
Luckie, D. M., Auckland  
Lusk, H. H., Auckland  
Lyll, J. L., Papakura  
Lysnar, C., Auckland

Macmillan, C. C., Remuera  
MacCormick, J. C., Auckland  
Macdonald, A. V., C.E., Auckland  
McDonald, D. E., C.E., Auckland  
Macfarlane, J. S., Auckland  
Macfarlane, T., Auckland  
Macfarland, R. J., C.E., Grahams-  
town

Mackechnie, E. A., Auckland  
Mackellar, H. S., Wellington  
Macindoe, D., Auckland  
Maclean, Sir D., Napier  
Maclean, Hon. E., Howick  
Macrae, F., Auckland  
Mair, Capt. G., Tauranga  
Mair, R., Whangarei  
Mair, Major W. G., R.M.,  
Alexandra  
Maning, F. E., Hokianga  
Martin, J., Auckland  
Maunsell, Ven. Archdeacon W.,  
Parnell  
Meinertzhagen, F. M., Napier  
Mitford, G. M., Parnell  
Morton, H. B., Auckland  
Morrin, T., Auckland  
Monro, H. A. H., Auckland  
Moss, F. H., Auckland  
Murdoch, D. L., Epsom

Nathan, L. D., Auckland  
Nation, Col., Parnell  
Nelson, Rev. C. M., M.A.,  
Auckland

O'Neill, C., C.E., Auckland  
O'Rorke, G. M., Onehunga  
O'Sullivan, R. J., Auckland  
Owen, G. B., Epsom

Peacock, T., Auckland

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Philips, P. A., Auckland  
Philips, C., Auckland  
Pollen, Hon. D., M.D., Auckland  
Pond, J. A., Auckland  
Pounds, J. E., Auckland  
Preece, J. W., Auckland  
Purchas, Rev. A. G., M.R.C.S.E.,  
Newton

Rapson, S., Kaukapakapa  
Ratray, W., Auckland  
Rayner, G., Coromandel  
Richmond, J., Auckland  
Robertson, J., Auckland  
Robertson, J., Otahuhu  
Ronaldson, J., Kawakawa  
Rose, R., Auckland  
Russell, T., Auckland

Scott, W., Paterangi  
Sheath, A., Auckland  
Sheehan, J., Auckland  
Sheppard, A. M., Otahuhu  
Shera, J. M., Auckland  
Sinclair, A., Remuera  
Slatter, J., Epsom  
Sloman, J. F., B.A., Auckland  
Smales, Rev. G., East Tamaki  
Smart, J., Auckland  
Smith, S. P., Parnell  
Spencer, T., Grahamstown  
Spencer, W. J., M.R.C.S.E.,  
Napier  
Steel, Capt., Hamilton  
Stephens, Ingham, Remuera  
Stevenson, J. Y., Remuera  
Stewart, J., C.E., Auckland  
Stewart, T. M., Melbourne  
Stockwell, W., L.R.C.S.E.,  
Auckland  
Stone, C. J., Auckland

Taylor, Hon. C. J., Auckland  
Taylor, J., Auckland  
Taylor, W. W., Waiuku  
Thorne, G., jun., Auckland  
Tilly, Lieut. T. C., R.N.,  
Remuera  
Tinne, T. F. S., Auckland  
Tonks, B., Parnell  
Tothill, C., Auckland  
Tunny, J. M., Remuera

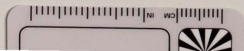
Vogel, Sir Julius, Wellington  
Von der Heyde, G., Auckland

Waddington, E., M.D., Alexandra  
Wallace, J., Flat Bush  
Wallis, Rev. J., D.D., Auckland  
Walker, R., Auckland  
Ware, W., Auckland  
Watt, J., Auckland  
Waymouth, J., Auckland  
Wayte, E., Auckland  
Webster, J., Hokianga  
Weetman, S., Mongonui  
Whitaker, F., Auckland  
White, T. L., Auckland  
Whitson, R. W., Auckland  
Will, W., Auckland  
Williams, H., Bay of Islands  
Williams, H. M., Auckland  
Williams, W. H., Kawakawa  
Williams, The Ven. Archdeacon  
W. L., Gisborne  
Williamson, Hon. J., Auckland  
Wilson, Major J., Cambridge  
Wilson, J. L., Whangarei  
Wilson, W. C., Auckland  
Wright, F. W., L.M.B. Toronto,  
Parnell

Young, W., Kaipara



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